

## ABSTRACT OF THE INVENTION

2 An adjustable down-hole tool, for example a drill-string stabiliser (10), comprises a  
3 body (12) having a through bore (16). A mandrel (18) is rotationally fixed but axially  
4 movable in the body, the mandrel being movable by fluid pressure in the tool against the  
5 action of a first return spring (44) between a first, activated position and a second deactivated  
6 position. A sleeve (66) is between shoulders (68, 69) on the body and mandrel. Castellations  
7 (18a,b, 69a,b) are on the mandrel and facing edge or edges of the sleeve so that, when the  
8 castellations are in phase the mandrel is prevented from travelling from said first to second  
9 position and when they are out of phase they interdigitate and the mandrel is not prevented  
10 from travelling from said first to second position. A control piston (36) is slidable in the  
11 mandrel, being movable by fluid pressure in the tool against the action of a second return  
12 spring (50). The piston is axially slidable with respect to said sleeve and rotationally fixed  
13 with respect thereto. A circumferential barrel cam (56) is defined on the piston, a cam  
14 follower (58) being disposed in the mandrel but within the confines of the barrel cam so that  
15 axial movement of the piston with respect to the mandrel results in corresponding rotation of  
16 the piston with respect to the mandrel.